

CLAIMS

What is claimed is:

- 5 1. A method for providing efficient use of a transmit engine in transmitting packet directing information, said method comprising the steps of:
- a) loading a first memory with packet directing information, said first memory adapted to provide information to drive a transmit engine to direct packets therefrom;
- 10 b) provided said loading of said step a) is completed, marking said first memory as busy and directing said packets according to said packet directing information; and
- c) provided said first memory is marked as busy, directing additional packet directing information to a second memory such that said second
- 15 memory is adapted to be loaded with said additional packet directing information without interrupting said first memory, said second memory adapted to provide information to drive said transmit engine to direct packets therefrom.
- 20 2. The method as recited in Claim 1 further comprising the steps of:
- d) provided said first memory has completed directing packets to hardware according to said packet directing information, marking said first memory as free;

e) provided said loading of said step c) is completed and said first memory is marked as free, marking said second memory as busy and directing said packets according to said additional packet directing information.

5 3. The method as recited in Claim 2 further comprising the step of:

f) provided said second memory is marked as busy, directing additional packet directing information to said first memory such that said first memory is adapted to be loaded with said additional packet directing information without interrupting said second memory.

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4. The method as recited in Claim 3 further comprising a third memory, said third memory adapted to be loaded with said additional packet directing information without interrupting said second memory, said third memory adapted to provide information to drive said transmit engine to direct
15 said packets to hardware.

5. The method as recited in Claim 1 wherein a primary memory comprises said first memory and said second memory such that said first memory and said second memory are partitioned locations of said primary
20 memory.

6. The method as recited in Claim 5 wherein said primary memory further comprises a third memory such that said third memory is a partitioned location of said primary memory.

5 7. The method as recited in Claim 1 wherein said first memory and said second memory are linked together to operate as a single memory.

8. A computer system comprising:

a bus;

10 a memory unit coupled to said bus; and

a processor coupled to said bus, said processor for executing a method for providing efficient use of a transmit engine in transmitting packet directing information, said method comprising the steps of:

15 a) loading a first memory with packet directing information, said first memory adapted to provide information to drive a transmit engine to direct packets therefrom;

b) provided said loading of said step a) is completed, marking said first memory as busy and directing said packets according to said packet directing information; and

20 c) provided said first memory is marked as busy, directing additional packet directing information to a second memory such that said second memory is adapted to be loaded with said additional packet directing information without interrupting said first memory, said second memory

adapted to provide information to drive said transmit engine to direct packets therefrom.

9. The computer system as recited in Claim 8 wherein said
5 processor performs said method for providing efficient use of a transmit engine in transmitting packet directing information, said method further comprising the steps of:

d) provided said first memory has completed directing packets to
hardware according to said packet directing information, marking said first
10 memory as free;

e) provided said loading of said step c) is completed and said first
memory is marked as free, marking said second memory as busy and
directing said packets according to said additional packet directing information.

10. The computer system as recited in Claim 9 wherein said
15 processor performs said method for providing efficient use of a transmit engine in transmitting packet directing information, said method further comprising the step of:

f) provided said second memory is marked as busy, directing
20 additional packet directing information to said first memory such that said first memory is adapted to be loaded with said additional packet directing information without interrupting said second memory.

11. The computer system as recited in Claim 10 further comprising a third memory, said third memory adapted to be loaded with said additional packet directing information without interrupting said second memory, said third memory adapted to provide information to drive said transmit engine to
5 direct said packets to hardware.

12. The computer system as recited in Claim 8 wherein said memory unit comprises said first memory and said second memory such that said first memory and said second memory are partitioned locations of said memory
10 unit.

13. The method as recited in Claim 12 wherein said memory unit further comprises a third memory such that said third memory is a partitioned location of said memory unit.
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14. The method as recited in Claim 8 wherein said first memory and said second memory are linked together to operate as a single memory.

15. A computer-usable medium having computer readable program
20 code embodied therein for causing a computer system to perform the steps of:

a) loading a first memory with packet directing information, said first memory adapted to provide information to drive a transmit engine to direct packets therefrom;

b) provided said loading of said step a) is completed, marking said first memory as busy and directing said packets according to said packet directing information; and

c) provided said first memory is marked as busy, directing additional
5 packet directing information to a second memory such that said second memory is adapted to be loaded with said additional packet directing information without interrupting said first memory, said second memory adapted to provide information to drive said transmit engine to direct packets therefrom.

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16. The computer-usable medium as recited in Claim 15 wherein said computer readable program code embodied therein for causes a computer system to perform the steps of:

d) provided said first memory has completed directing packets to
15 hardware according to said packet directing information, marking said first memory as free;

e) provided said loading of said step c) is completed and said first memory is marked as free, marking said second memory as busy and directing said packets according to said additional packet directing information.

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17. The computer-usable medium as recited in Claim 16 wherein said computer readable program code embodied therein for causes a computer system to perform the step of:

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22. A method for providing efficient use of a transmit engine in transmitting packet directing information, said method comprising the steps of:

a) loading a first memory with packet directing information, said first memory adapted to provide information to drive a transmit engine to direct packets therefrom, said first memory residing in a partitioned location of a primary memory;

b) provided said loading of said step a) is completed, marking said first memory as busy and directing said packets according to said packet directing information;

c) provided said first memory is marked as busy, directing additional packet directing information to a second memory such that said second memory is adapted to be loaded with said additional packet directing information without interrupting said first memory, said second memory adapted to provide information to drive said transmit engine to direct packets therefrom, said second memory residing in a partitioned location of said primary memory;

d) provided said first memory has completed directing packets to hardware according to said packet directing information, marking said first memory as free;

e) provided said loading of said step c) is completed and said first memory is marked as free, marking said second memory as busy and

directing said packets according to said additional packet directing information;
and

f) provided said second memory is marked as busy, directing
additional packet directing information to said first memory such that said first
5 memory is adapted to be loaded with said additional packet directing
information without interrupting said second memory.

23. The method as recited in Claim 22 further comprising a third
memory, said third memory adapted to be loaded with said additional packet
10 directing information without interrupting said second memory, said third
memory adapted to provide information to drive said transmit engine to direct
said packets to hardware.

24. The method as recited in Claim 23 wherein said primary memory
15 further comprises a third memory such that said third memory is a partitioned
location of said primary memory

25. The method as recited in Claim 22 wherein said first memory and
said second memory are linked together to operate as a single memory.